

**Datasheet for 600-306-215****GFP Antibody Biotin Conjugated****Overview**

|                      |                                                                      |
|----------------------|----------------------------------------------------------------------|
| <b>Description:</b>  | Anti-GFP (MOUSE) Monoclonal Antibody Biotin Conjugated - 600-306-215 |
| <b>Item No.:</b>     | 600-306-215                                                          |
| <b>Size:</b>         | 1 mg                                                                 |
| <b>Applications:</b> | ELISA, IHC, WB, Purification                                         |
| <b>Reactivity:</b>   | GFP, eGFP, rGFP                                                      |
| <b>Host Species:</b> | Mouse                                                                |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | Green fluorescent protein is a 27 kDa protein produced from the jellyfish Aequorea victoria, which emits green light (emission peak at a wavelength of 509nm) when excited by blue light. GFP is an important tool in cell biology research. GFP is widely used enabling researchers to visualize and localize GFP-tagged proteins within living cells without the need for chemical staining. |
| <b>Synonyms:</b>     | mouse anti-GFP antibody biotin conjugation, biotin conjugated mouse anti-GFP antibody, Green Fluorescent Protein, GFP antibody, Green Fluorescent Protein antibody, EGFP, enhanced Green Fluorescent Protein, Aequorea victoria, Jellyfish                                                                                                                                                     |
| <b>Host Species:</b> | Mouse                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Conjugate:</b>    | Biotin                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Clonality:</b>    | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Clone ID:</b>     | 9F9.F9                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                            |

**Target Details**

|                        |                     |
|------------------------|---------------------|
| <b>Reactivity:</b>     | GFP, eGFP, rGFP     |
| <b>Immunogen Type:</b> | Recombinant Protein |

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen:</b>          | Anti-Green Fluorescent Protein (GFP) is produced by immunizing GFP containing fusion protein that corresponds to the full length amino acid sequence (246aa) derived from the jellyfish <i>Aequorea victoria</i> .                                                                                                                                                                                                                 |
| <b>Purity/Specificity:</b> | GFP Biotin Conjugated Antibody was prepared from tissue culture supernatant by Protein A affinity chromatography. Assay by Immunoelectrophoresis resulted in a single precipitin arc against anti-biotin and anti-Mouse Serum. Reactivity is observed against recombinant Green Fluorescent Protein (000-001-215, recombinant GFP from <i>Aequorea victoria</i> ) by both Western blot and ELISA. No reaction is seen against RFP. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P42212</a></li></ul>                                                                                                                                                                                                                                                                                                                                               |

## Application Details

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b>    | ELISA, IHC, WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Suggested Applications:</b> | Purification (Based on references)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Application Note:</b>       | Monoclonal anti-GFP is designed to detect enhanced GFP and GFP containing recombinant proteins. Tested in E, WB, IHC. This antibody can be used to detect GFP by ELISA (sandwich or capture) for the direct binding of antigen. Biotin conjugated monoclonal anti-GFP is well suited to titrate GFP in a sandwich ELISA in combination with Rockland's polyclonal anti-GFP (600-101-215) as the capture antibody. Only use the monoclonal form for the detection of enhanced or recombinant GFP. Polyclonal anti-GFP detects all variants of GFP tested to date. The biotin conjugated detection antibody is typically used with streptavidin conjugated HRP (code # S000-03) or other streptavidin conjugates. The use of polyclonal anti-GFP results in significant amplification of signal when fluorochrome conjugated polyclonal anti-GFP is used relative to the fluorescence of GFP alone. For immunoblotting use either alkaline phosphatase or peroxidase conjugated anti-GFP to detect GFP or GFP containing proteins on western blots. Optimal titers for applications should be determined by the researcher. |
| <b>Assay Dilutions:</b>        | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>ELISA:</b>                  | 1:50,000 - 1:200,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>IHC:</b>                    | 1:1,000 - 1:5,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>WB:</b>                     | 1:2,000 - 1:10,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## Formulation

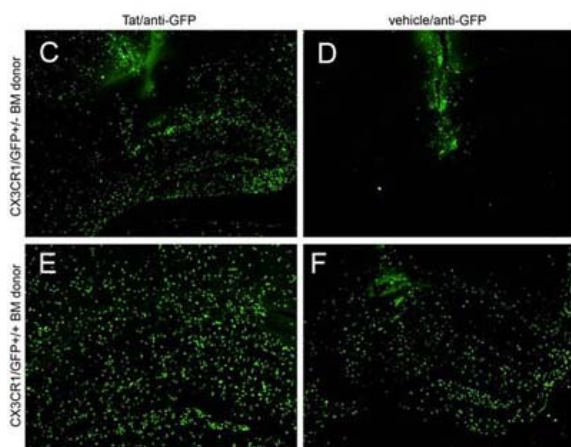
|                        |                                                            |
|------------------------|------------------------------------------------------------|
| <b>Physical State:</b> | Lyophilized                                                |
| <b>Concentration:</b>  | 1.0 mg/mL by UV absorbance at 280 nm                       |
| <b>Buffer:</b>         | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>   | 0.01% (w/v) Sodium Azide                                   |

|                               |                                                                        |
|-------------------------------|------------------------------------------------------------------------|
| <b>Stabilizer:</b>            | 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free |
| <b>Reconstitution Volume:</b> | 1.0 mL                                                                 |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent)                           |

## Shipping & Handling

|                            |                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shipping Condition:</b> | Ambient                                                                                                                                                                                                                                                                                                                                         |
| <b>Storage Condition:</b>  | Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |
| <b>Expiration:</b>         | Expiration date is one (1) year from date of receipt.                                                                                                                                                                                                                                                                                           |

## Images



### Immunohistochemistry

IHC - Immuno-Fluorescence of Biotin Mouse anti-GFP antibody. Biotin mouse anti GFP used 1:5000 As referenced in: Lu S-M, Tremblay M-E, King IL, Qi J, Reynolds HM, et al. (2011) HIV-1 Tat-Induced Microgliosis and Synaptic Damage via Interactions between Peripheral and Central Myeloid Cells. PLoS ONE 6(9): e23915. doi:10.1371/journal.pone.0023915



#### Western Blot

Western Blot of Anti-GFP (MOUSE) Monoclonal Antibody Biotin Conjugated antibody. Lane 1: 50ng of GFP. Lane 2: none. Primary antibody: none. Secondary antibody: Anti-GFP (MOUSE) Monoclonal Antibody Biotin Conjugated (p/n 600-306-215) secondary antibody was used at 1:5000 in Blocking Buffer for Fluorescent Western Blotting (p/n MB-070) for 45 min at RT. HRP Streptavidin (p/n S000-03) was used at 1:40,000 in MB-070 for 30 min at 20°C. Block: 5% Blotto (p/n B501-0500) 30 min at 20°C. Predicted/Observed size: 28 kDa for GFP. Other band(s): none.

## References

- Ismaeel A et al. Division-Independent Differentiation of Muscle Stem Cells During a Growth Stimulus. *Stem Cells*. (2024)
- Jain, A et al. Probing cellular protein complexes using single-molecule pull-down. *Nature* (2011)
- Graf ER et al. Neurexins induce differentiation of GABA and glutamate postsynaptic specializations via neuroligins. *Cell*. (2004)
- C Wang et al. Recombinant AAV serotype 1 transduction efficiency and tropism in the murine brain. *Gene Ther*. (2003)

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.